## REMARKS/ARGUMENTS

The Office Action of December 16, 2005 has been carefully reviewed and this response addresses the concerns stated in the Office Action. All objections and rejections are respectfully traversed.

I. STATUS OF THE CLAIMS

Claims 1-35 and 37-64 are currently pending.

Claim 36 was previously canceled without prejudice.

Claims 1-35 and 37-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Vaishnavi et al., U.S. Patent # 5,734,642, issued on March 31, 1998 (Vaishnavi).

Claims 21, 23, and 46 are amended to correct typographical informalities. No new matter is added.

II. REJECTION OF CLAIMS 1-35 AND 37-64 UNDER 35 USC § 102(e) AS BEING ANTICIPATED BY VAISHNAVI

There are distinct differences between the claimed invention and the cited reference. In order to clarify the main issues, Applicant asserts that the claimed invention and the cited reference are different at least in the following ways:

(1) Vaishnavi does not disclose or suggest Applicant's claimed step of presenting a user interface (independent claim 1), nor Applicant's claimed graphical user interface (dependent claim 24), nor Applicant's claimed step of receiving input from a user (independent claim 35).

(2) Vaishnavi does not disclose or suggest the concept of a number of consecutive polls (independent claim 59 and dependent claims 16, 60, and 62).

(3) Vaishnavi does not disclose or suggest Applicant's claimed triggering execution of a poll service in response to the occurrence of a user defined event (dependent claim 28).

(4) Vaishnavi does not disclose or suggest Applicant's claimed polling gateway (independent claims 35 and 59).

(5) Vaishnavi does not disclose or suggest Applicant's claimed user-defined equations (dependent claim 11).

(6) Vaishnavi does not disclose or suggest a system in which polling gateways only communicate data satisfying at least one state model to the central management system (dependent claims 7, 39, and 52).

(7) Vaishnavi does not disclose or suggest Applicant's claimed step of correlating various different models (dependent claims 19, 20, 44, and 45).

(8) Vaishnavi presents no structure that would provide for Applicant's claimed dynamic definition of a state model and/or poll service during runtime (independent claims 48 and 64, dependent claims 32-34 and 51).

(9) Vaishnavi does not disclose or suggest Applicant's claimed distributed polling gateway that filters data (dependent claims 6 and 38).

Applicant further respectfully points out that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (CAFC, 1987), M.P.E.P. § 2131. As provided by the remarks set forth below, clearly this is not the case with the present rejection of the claims. For example, although there are numerous other claimed limitations lacking as pointed out below, the limitations presented below in the independent claims as well as the dependent claims are provided as a basis for clearly setting forth the lack of Applicant's claimed subject matter in Vaishnavi.

Note that dependent claims 2-34 depend upon independent claim 1, dependent claims 37-47 depend upon independent claim 35, dependent claims 49-58 depend upon independent claim 48, and dependent claims 60-63 depend upon independent claim 59.

Note further that in the following discussion, claims are presented according to the reference citation that supports the rejection of that claim. Following is a table that relates citations to claims.

| Citation | Claims rejected based on the citation | Page(s) in Office Action |
|---|---|---|
| col. 4, lines 28-40 | 1, 2, 24, 35 | 2-3 |
| col. 5, lines 3-16; col. 6, lines 26-42 | 1, 21, 22, 26, 35, 46, 47, 58, 62, 63 | 2-3, 8, 11-12 |
| col. 5, lines 43-56 | 1, 2, 24, 35 | 3, 5, 8 |
| col. 5, lines 3-16 | 3, 15, 17, 27, 28, 35, 37, 42, 55, 60 | 3, 5, 7, 9, 11 |
| col. 3, lines 57-66 | 2, 4, 23, 48, 64 | 3-5, 8 |
| col. 4, lines 5-22; col. 5, lines 3-16 | 8, 11, 48, 59, 64 | 3-6 |
| col. 6, lines 26-42 | 7, 9, 19, 39, 44, 48, 49, 52, 61, 64 | 3-6, 8, 10 |
| col. 5, lines 23-42 | 5, 31, 50 | 5, 10-11 |
| col. 6, lines 9-20 | 6, 10, 20, 38, 45 | 5-6, 8 |
| col. 4, lines 5-22; col. 6, lines 26-42 | 12-14, 16, 29, 30, 32-34, 40, 41, 51, 53, 54 | 6-7, 9-11 |
| col. 4, lines 28-40; col. 6, lines 26-42 | 18, 25, 43 | 7-9 |
| col. 7, lines 9-16 | 56, 57 | 11 |

On pages 2-3, in paragraph 2, with respect to independent claims 1, 24, and 35 and dependent claims 2 and 24, the Office Action states that Vaishnavi discloses, in col. 4, lines 28-40, a method for implementing a state model for managing a network coupled to a central management comprising the step of presenting a user interface a management system to enable a user to define at least one state model for managing a at least one network element based on a determined state of said at least one network element (claim 1), communicatively coupling said user interface to said at least one distributed polling gateway (claim 2), wherein said user interface is a graphical user interface (claim 24), and a method for enabling state-based management of a network, wherein network elements are managed based on their state comprising the step of receiving input from a user at a management system to define at least one state model for managing at least one network element based on a determined state of said at least one network element (claim 35).

In the cited passage (col. 4, lines 28-40), Vaishnavi states that the synchronization module is implemented as software on a floppy disk or a hard drive that controls a computer, for example, a general purpose computer such as a workstation, a mainframe, or a personal computer, that the computer controls the steps of the processes in FIGs. 3 and 4, that the computer typically includes a CPU, RAM, program memory, and a data bus, that the computer is connected to a network to receive reports, and that the computer may provide commands to devices on the network in order to control the network

configuration. In other words, the computer that executes the system of Vaishnavi is conventionally equipped and is connected to a network in order to send the system's commands to network devices to control the network's configuration.

In rebuttal to the above, although Vaishnavi presents elements of the computer such as CPU and RAM, data bus, even floppy disk and hard drive, Vaishnavi does not mention a keyboard, monitor, mouse, or any such user interface mechanism. Further, nowhere does Vaishnavi disclose or suggest any occasion in which a user interface would be presented to a user. Nor is it obvious that a user would be needed to define the parameters and structures of Vaishnavi because Vaishnavi's system seems to be fully automated: a device status is determined, device data are collected, a new device status is determined, and an action is taken with respect to the device all automatically. Vaishnavi does not state how the plurality of states listed in col. 6, lines 34-37 become a part of the system, but since Vaishnavi makes no provision whatsoever for a user interface but instead has automated all other features of the system, it would be invalid to assume a user entry mechanism that is not stated or suggested by Vaishnavi. Vaishnavi states that a network manager updates or initializes a device model (col. 2, lines 5-7), and that the network manager includes the synchronization module which is implemented as software (col. 4, lines 29-30), but Vaishnavi does not disclose or suggest Applicant's claimed step of presenting a user interface, nor Applicant's claimed step of receiving input from a user, nor Applicant's claimed graphical user interface, nor Applicant's claimed coupling of a user interface to a distributed polling gateway, Vaishnavi cannot anticipate Applicant's claims 1, 2, 24, and 35, and the rejection of claims 1, 2, 24, and 35 under 35 U.S.C. § 102 should be withdrawn.

On pages 2-3, 8, and 11-12, the Office Action has rejected claims 1, 21, 22, 26, 35, 46, 47, 58, 62, and 63 based on cited passages col. 5, lines 3-16 and col. 6, lines 26-42.

In the first cited passage (col. 5, lines 3-16), Vaishnavi states that the synchronization module can issue a poll request and a device can respond in the form of status information, that the polling manager, coupled to the model control module, provides poll requests to the devices of the network to query for device status, that the polling manager can include an internal clock or timer to control to trigger the transmission of a poll request, that a device may return a message indicative of contact

being established between the network manager and the device in response to the polling request.

In the second cited passage (col. 6, lines 26-42), Vaishnavi states that determining the previous state of a device may be achieved by accessing a memory location that stores the status information of a device, or by querying a model such as the object-oriented model of the device models, that the new state of the device is determined based upon the previous state and the status information received, that the new states may be one of a plurality of states (unknown, initialized, lost, established after lost, up, down, and unknown), and that by allowing the device model to contain more than two states, the synchronization module may more accurately represent the status of the device. In other words, the polling interval in Vaishnavi is determined by an internal clock or timer in the polling manager, the previous state of a device is stored in memory, the new state of the device is determined based on the previous state and received status information, and the new state can have greater than two values.

(1) With respect to claim 1, the Office Action states that Vaishnavi discloses the step of presenting a user interface for said central management system to enable a user to define at least one poll service that includes at least one of said at least one state model.

In rebuttal to the above, as previously stated, Vaishnavi has no provision whatsoever for a user interface. Further, there is no provision in Vaishnavi for defining a poll service that includes a state model. For Vaishnavi to anticipate the user definition of a poll service that includes a state model, Vaishnavi would have to provide a linkage between the polling manager and the state machine and make that linkage apparent to the user in order for the user to appropriately define a poll service that includes a state model. However, Vaishnavi does not disclose or suggest any linkage between the polling manager and any state model because the poll service that the polling manager provides is simply a periodic poll of devices. For these reasons, Vaishnavi does not anticipate Applicant's claim 1, and the rejection of claim 1 under 35 U.S.C. § 102 should be withdrawn.

(2) With respect to claims 21 and 46, the Office Action states that Vaishnavi discloses wherein said software code triggers an action upon a user-defined pattern of states of said various different models being achieved.

In rebuttal to the above, because Vaishnavi does not provide for user-definition of anything, then Vaishnavi cannot anticipate Applicant's claimed user-defined pattern of

states. Further, Vaishnavi does not disclose the concept of a pattern of states of said various different models because Vaishnavi includes a single network model that is populated by devices and status information (FIG. 2), where the status is determined by a single state table (FIG. 6) that is accessed when device information is received, and is used to change the state of the device in the network model. For these reasons, Vaishnavi does not anticipate Applicant's claims 21 and 46, and the rejection of claims 21 and 46 under 35 U.S.C. § 102 should be withdrawn.

(3) With respect to claim 35, the Office Action states that Vaishnavi discloses the step of receiving input from a user at said management system to define at least one poll service that includes at least one of said at least one state model.

In rebuttal to the above, as previously stated, there is no mechanism stated in Vaishnavi for user input. Further, as stated previously, there is no mechanism stated by which to define a poll service that includes a state model. For Vaishnavi to anticipate Applicant's claim 35, Vaishnavi would have to disclose hardware and software to receive user input, which it does not, and would have to provide an inclusive relationship between the polling manager and the state machine. Since Vaishnavi fails as a reference for these two reasons, Vaishnavi cannot anticipate Applicant's claim 35 and the rejection of claim 35 under 35 U.C.S. § 102 should be withdrawn.

(4) With respect to claim 62, the Office Action states that Vaishnavi discloses wherein if said user-defined state transition condition is satisfied for a user-defined number of consecutive polls of said at least one network element, then one or more user-defined transition actions for the user defined state transition are triggered (claim 62).

In rebuttal to the above, as previously stated, there is no mechanism stated in Vaishnavi for user input. Thus, user definition of a state transition condition is not possible in the system of Vaishnavi. Further, Vaishnavi does not disclose or suggest the concept of a number of consecutive polls. In Vaishnavi, the polling manager issues a poll request periodically as long as the system is operating. There is no provision for limiting the number of consecutive poll requests in Vaishnavi. For these reasons, Vaishnavi cannot anticipate Applicant's claim 62 and the rejection of claim 62 under 35 U.C.S. § 102 should be withdrawn.

Applicant asserts that dependent claims 22, 26, 47, 58, and 63 are allowable at least by virtue of their dependence upon allowable independent claims 1, 35, 48, and 59.

On page 3, with respect to claims 1 and 35, the Office Action states that Vaishnavi discloses in col. 5, lines 43-56 the step of executing said at least one poll service to manage said at least one network element (claim 1), and the step of executing said at least one poll service at said at least one distributed polling gateway to manage said at least one network element (claim 35).

In the cited passage (col. 5, lines 43-56), Vaishnavi states that the model control module controls the discovery mechanism to perform discovery, that the discovery mechanism provides discovery commands to devices of the network and receives response from them, that the discovery process may result in certain events such as discovery successful and discovery failure that ultimately assist in providing device status. Elsewhere, Vaishnavi states that discovery and poll requests are used to acquire information regarding the status of the devices within the network (col. 5, lines 56-62), that the device model, whose device states are determined in part by the information gathered by discovery and polling, can be used by the network manager as a basis by which to control a manageable device (col. 2, lines 12-14).

In rebuttal to the above, neither discovery commands nor poll requests perform Applicant's claimed step of executing a poll service to manage a network element because the management of devices in Vaishnavi is conducted by either the reset mechanism (FIG. 2) or the control module which is provided status information by the synchronization module and determines an appropriate action to take (col. 3, lines 64-67). Vaishnavi's FIG. 2 clearly shows that the polling manager simply issues poll requests. Because of this, Vaishnavi cannot anticipate Applicant's claims 1 and 35, and the rejection of claims 1 and 35 under 35 U.S.C. § 102 should be withdrawn.

On pages 3, 5, 7, 9, and 11, the Office Action has rejected claims 3, 15, 17, 27, 28, 35, 37, 42, 55, and 60 based on cited passage col. 5, lines 3-16.

In the cited passage (col. 5, lines 3-16), Vaishnavi states that the synchronization module can issue a poll request and a device can respond in the form of status information, that the polling manager, coupled to the model control module, provides poll requests to the devices of the network to query for device status, that the polling manager can include an internal clock or timer to control triggering the transmission of a poll request, that a device may return a message indicative of contact being established between the network manager and the device in response to the polling request.

(1) With respect to claims 3 and 37, the Office Action states that Vaishnavi discloses the step of distributing said at least one poll service defined by said user.

In rebuttal to the above, Vaishnavi does not perform Applicant's claimed step of distributing a poll service because Vaishnavi does not disclose or suggest any distribution of the polling manager whatsoever. Even though Vaishnavi states that the function of the network manager could be distributed (col. 9, lines 31-34), there is no infrastructure stated to support the polling manager's physical disconnection from the model control module. For example, no redundancy of the polling manager is stated, nor provisions for managing the situation of when the polling manager executes on a device that itself fails. Further, as previously discussed, there is no provision in Vaishnavi for the poll service to be defined by a user. For these reasons, Vaishnavi does not anticipate Applicant's claims 3 and 37, and the rejection of claims 3 and 37 under 35 U.S.C. § 102 should be withdrawn.

(2) With respect to claims 15, 17, 42, and 55, the Office Action states that Vaishnavi discloses wherein one or more user-defined transition actions for said state transition are triggered in response to said state transition.

In rebuttal to the above, as stated previously, Vaishnavi does not disclose or suggest any sort of user interface. Without a user interface, Vaishnavi cannot anticipate Applicant's claimed user-defined transition actions. Vaishnavi's actions, depicted in FIG. 6, become available to the system in an unspecified way, and no way to modify them is disclosed or suggested. Because Vaishnavi is a fully automated system with no reference whatsoever to user input, it is invalid to assume that Vaishnavi's actions are entered by a user. For this reason, Vaishnavi cannot anticipate Applicant's claims 15, 17, 42, and 55, and the rejection of claims 15, 17, 42, and 55 under 35 U.S.C. § 102 should be withdrawn.

(3) With respect to claim 28, the Office Action states that Vaishnavi discloses wherein said executing said at least one poll service further includes triggering execution of said at least one poll service in response to the occurrence of a user defined event.

In rebuttal to the above, although Vaishnavi states that the polling manager is triggered to send a poll request by an internal clock or timer, Vaishnavi does not disclose or suggest Applicant's claimed triggering execution of a poll service in response to the occurrence of a user defined event. To anticipate Applicant's claim 28, Vaishnavi would have to couple the responses to the poll requests with the polling manager's triggering mechanism, a capability that is nowhere disclosed or suggested. Further, Vaishnavi, to

anticipate Applicant's claim 28, would have to provide a mechanism for a user to define an event, which Vaishnavi does not disclose or suggest. For these reasons, Vaishnavi cannot anticipate Applicant's claim 28, and the rejection of claim 28 under 35 U.S.C. § 103 should be withdrawn.

(4) With respect to claim 35, the Office Action states that Vaishnavi discloses the step of distributing said at least one poll service including said at least one state model to at least one distributed polling gateway that is communicatively coupled with said at least one network element.

In rebuttal to the above, although Vaishnavi's synchronization module contains the polling manager, and Vaishnavi's network manager includes the synchronization module (col. 3, lines 57-58), Vaishnavi does not include either a polling gateway or the mechanism for transferring the polling manager from the synchronization module (within the network manager) to any other computer, including a polling gateway. Applicant claims receiving input from a user at a management system to define a poll service, and then distributing that poll service (from the management system where it was created) to a polling gateway. Vaishnavi's system simply includes a network manager and network elements, whereas the steps of Applicant's claim 35 states a structure that includes a management system and a polling gateway, where the polling gateway is coupled with the network elements. There is no way to accomplish Applicant's claimed step of distributing the poll service to the polling gateway in the system of Vaishnavi because there is no analogous structure to Applicant's polling gateway in Vaishnavi. For these reasons, Vaishnavi does not anticipate Applicant's claim 35 and the rejection of claim 35 under 35 U.S.C. § 102 should be withdrawn.

(5) With respect to claim 60, the Office Action states that Vaishnavi discloses wherein said user-defined number of consecutive polls is a plurality of polls (claim 60).

In rebuttal to the above, although Vaishnavi states that a polling manager may include an internal clock or timer, and that the polling frequency is, for example, 10 seconds, Vaishnavi does not disclose how the polling frequency is changed, and Vaishnavi gives no mechanism for a user to change the polling mechanism. For Vaishnavi to anticipate Applicant's claim 60, Vaishnavi would have to maintain a parameter that counts the number of consecutive polls, and Vaishnavi would have to provide a mechanism for a user to change the number of consecutive polls. Since Vaishnavi provides neither

capability, Vaishnavi cannot anticipate Applicant's claim 60, and the rejection of claim 60 under 35 U.S.C. § 102 should be withdrawn.

Applicant asserts that claim 27 is allowable at least by virtue of its dependence on allowable independent claim 1.

On pages 3-5 and 8, with respect to claims 2 and 4, the Office Action states that Vaishnavi discloses, in col. 3, lines 57-66, the step of distributing said at least one poll service to at least one distributed polling gateway that is communicatively coupled with said at least one network element (claim 2), and the step of distributing said at least one poll service defined by said user to a plurality of distributed polling gateways for execution thereon (claim 4)

In the cited passage (col. 3, lines 57-66), Vaishnavi states that the network manager includes a synchronization module for determining the status of the manageable devices and a control module for providing appropriate control, that the synchronization module receives status information from the network and provides status inquiries to the network, and that the synchronization module determines the status of the manageable devices of the network and provides this status information to the control module, which determines appropriate action to take.

In rebuttal to the above, as previously stated, Vaishnavi does not provide the capability to distribute its polling manager, nor does Vaishnavi provide a polling gateway. For these reasons, Vaishnavi does not anticipate Applicant's claims 2 and 4, and the rejection of claims 2 and 4 under 35 U.S.C. § 102 should be withdrawn.

Applicant asserts that dependent claim 23 is patentable at least by virtue of its dependence upon allowable independent claim 1.

On pages 3-6, the Office Action rejects claims 8, 11, 48, 59, and 64 based on cited passages col. 4, lines 5-22 and col. 5, lines 3-16.

In the first cited passage (col. 4, lines 5-22), Vaishnavi states that the synchronization module includes a model control module coupled to a network model that includes device models, that the model control module is coupled to each of a state machine, a polling manager, a discovery mechanism, and a reset mechanism, that the model control module creates and maintains device models that represent the status of manageable devices, that the network model may contain additional information (to the device models shown in the drawing), such as connectivity information with respect to the

devices of the network, that synchronization is achieved when the state of the network model matches the state of the actual network, and that the control module reads the status of the devices when synchronization is reached to determine appropriate control to be applied to the network. In other words, the model control modules creates device and therefore network models that are compared to the actual network, and when the model and the actual network match, the control module uses the status of the devices in the network to determine an action to take with respect to the network.

In the second cited passage (col. 5, lines 3-16), Vaishnavi states that the synchronization module can issue a poll request and a device can respond in the form of status information, that the polling manager, coupled to the model control module, provides poll requests to the devices of the network to query for device status, that the polling manager can include an internal clock or timer to control to trigger the transmission of a poll request, that a device may return a message indicative of contact being established between the network manager and the device in response to the polling request. In other words, in order to create and maintain the device and network models, the synchronization module collects device information through the polling manager.

(1) With respect to claim 8, the Office Action states that Vaishnavi discloses wherein said at least one distributed polling gateway executes software to evaluate a user-defined state model condition to determine whether to execute each of said at least one state model.

In rebuttal to the above, as stated previously, Vaishnavi would have to disclose a way by which a user could define a state model in order for Vaishnavi to anticipate Applicant's claim 8. Further, Vaishnavi does not disclose any structure equivalent to Applicant's claimed distributed polling gateway because Vaishnavi's network manager is directly coupled with Vaishnavi's network elements. For these reasons, Vaishnavi does not anticipate Applicant's claim 8, and the rejection of claim 8 under 35 U.S.C. § 102 should be withdrawn.

(2) With respect to claim 11, the Office Action states that Vaishnavi discloses wherein said at least one distributed polling gateway executes software to evaluate one or more user-defined equations for said at least one state model utilizing the retrieved variable values.

In rebuttal to the above, while the cited passages state a structure that includes a network manager that includes a synchronization manager and a control manager, where the network manager communicates with network elements, Applicant, on the contrary, claims a method that is built on a structure that includes a distributed polling gateway that communicates with network elements, and that receives a polling service from a central management system. Further, Applicant claims the polling gateway executes software to evaluate user-defined equations. Even if Vaishnavi's structure included a polling gateway between its network manager and its network elements that received a polling service, which it does not, Vaishnavi does not disclose or suggest Applicant's claimed user-defined equations. Even if Vaishnavi could be broadly read to interpret its state model entries as resulting from equations, Vaishnavi neither discloses nor suggests a method by which a user could define equations. For these reasons, Vaishnavi does not anticipate Applicant's claim 11, and the rejection of claim 11 under 35 U.S.C. § 102 should be withdrawn.

(3) With respect to claim 48, the Office Action states that Vaishnavi discloses one or more distributed gateways for monitoring said at least one network element, said one or more distributed gateways communicatively coupled to a central management system between said at least one network element and said central management system (claim 48).

In rebuttal to the above, as stated previously, whereas Vaishnavi states a structure that includes a network manager and network elements, Applicant, on the contrary, states a structure having a central management system, distributed gateways, and network elements. For this reason, Vaishnavi does not anticipate Applicant's claim 48 and the rejection of claim 48 under 35 U.S.C. § 102 should be withdrawn.

(4) With respect to claim 59, the Office Action states that Vaishnavi discloses a method for performing state-based management of a network, wherein network elements are managed based on their state including the step of executing, on at least one distributed gateway located between the central management system and the network elements at least one user-defined state model for managing at least one network element based on a determined state of said at least one network element, wherein said executing at least one user-defined state model includes polling said at least one network element for data, evaluating said data to determine whether a user-defined state transition condition is

satisfied, and triggering a state transition if said user-defined state transition condition is satisfied for a user-defined number of consecutive polls of said at least one network element.

In rebuttal to the above, as stated previously, whereas Applicant claims a method that relies on a structure that includes a central management system, network elements, and a distributed polling gateway on which is executing a state model, and Vaishnavi's structure includes a network manager and network elements, Vaishnavi does not, thus, anticipate Applicant's claimed method including a distributed polling gateway. Further, Applicant claims a method that relies on a user-defined state model, a user-defined state transition, and a user-defined consecutive number of polls. Vaishnavi neither discloses nor suggests any form of user interface in which the user could define a state model, a state transition, and a number of consecutive polls. Even if Vaishnavi disclosed a user-defined state model and state transition, which it does not, there is no provision whatsoever in Vaishnavi for a user to define a consecutive number of polls. Applicant's claimed user-defined number of consecutive polls is a parameter that is established by the user to indicate to the system when to stop polling the device. There is no such concept in Vaishnavi whatsoever. For these reasons, Vaishnavi does not anticipate Applicant's claim 59, and the rejection of claim 59 under 35 U.S.C. § 102 should be withdrawn.

(5) With respect to claim 64, the Office Action states that Vaishnavi discloses a system for managing at least one network element comprising at least one gateway for monitoring said at least one network element, said at least one gateway communicatively coupled to a central management system between said at least one network element and said central management system.

In rebuttal to the above, as stated previously, whereas Vaishnavi's system includes a network manager and network elements, Applicant claims a system that includes a gateway communicatively coupled to a central management system, where the gateway is between the network element and the central management system. Even if Vaishnavi's polling manager were executing on a computer separate from the model control module, the model control module is linked to the devices because it receives status information directly from them (see FIG. 2). To anticipate Applicant's claimed structure, Vaishnavi's module interfaces would have to be modified in a way that is not disclosed or suggested

by Vaishnavi. Since Vaishnavi does not disclose or suggest Applicant's claimed structure in claim 64, the rejection of claim 64 under 35 U.S.C. § 102 should be withdrawn.

On pages 3-6, 8, and 10, the Office Action rejects claims 7, 9, 19, 39, 44, 48, 49, 52, 61, and 64 based on cited passage col. 6, lines 26-42.

In the cited passage (col. 6, lines 26-42), Vaishnavi states that to determine the previous state of the device, a memory location that stores the status information can be accessed, or a model can be queried, that the new state of the device is determined based upon the previous state and device status information, that the new state may be unknown, initialized, lost, established after lost, up, down, and unknown, and that the synchronization module man present the status of each device more accurately with more than just two states.

(1) With respect to claims 7, 39, and 52, the Office Action states that Vaishnavi discloses wherein said at least one distributed polling gateway communicates data satisfying said at least one state model to said central management system. Applicant respectfully points out that claims 7, 39, and 52 state that "at least one distributed polling gateway *only* communicates data satisfying said at least one state model to said central management system (Emphasis added). The Office Action has failed to properly restate the claims. Applicant has responded to the rejection as if the omission were a typographical error.

In rebuttal to the above, Vaishnavi does not disclose or suggest a system that includes a distributed polling gateway, nor does Vaishnavi disclose or suggest a system in which polling gateways only communicate data satisfying at least one state model to the central management system, because Vaishnavi states a system in which the new state of a device can take a fixed number of values, and is selected based on the previous state of the device and status information that is gathered by polling and discovery. Vaishnavi does not disclose a decision process that would include communicating only a subset of the data, even if Vaishnavi did disclose separate network manager and distributed gateway structures, which it does not. For these reasons, Vaishnavi cannot anticipate Applicants' claims 7, 39, and 52, and the rejection of claims 7, 39, and 52 under 35 U.S.C. § 102 should be withdrawn.

(2) With respect to claims 19 and 44, the Office Action states that Vaishnavi discloses the step of correlating various different models of said at least one state model.

In rebuttal to the above, in FIG. 2, Vaishnavi depicts device models within a network model, and Vaishnavi states that the device state is modified based on the previous state of the device and the gathered information about the device (state table as depicted in FIG. 6), but Vaishnavi does not disclose or suggest Applicant's claimed step of correlating various different models. For Vaishnavi to disclose a correlation step, Vaishnavi would have to present steps or structure that would choose one model to correlate with another. Instead, Vaishnavi discloses a straightforward system of selecting a new state for a device based on a state table such as the one depicted in FIG. 6, but does not disclose or suggest any sort of correlation of various models. For this reason, Vaishnavi cannot anticipate Applicant's claims 19 and 44, and the rejection of claims 19 and 44 under 35 U.S.C. § 102 should be withdrawn.

(3) With respect to claims 48 and 64, the Office Action states that Vaishnavi discloses at least one state model and managing said at least one network element based on a determined state of said at least one network element, said at least one state model capable of being dynamically defined during runtime.

In rebuttal to the above, although Vaishnavi states that the state machine 22 may be implemented as a hardware machine or may be implemented in software as predetermined logic, as predetermined memory locations, or as a lookup table (col. 6, line 66 – col. 7, line 3), the examples Vaishnavi provides of the state machine do not indicate how the state machine becomes known to the system, and further, Vaishnavi presents no structure that would provide for Applicant's claimed dynamic definition of a state model during runtime. Such a capability would require synchronization among the modules that are accessing the state machine in runtime in order to insure that incorrect or duplicative instructions aren't transmitted to the network elements as a result of a state machine change in runtime. Vaishnavi does not disclose or suggest such a synchronization among modules. For this reason, Vaishnavi cannot anticipate Applicant's claims 48 and 64, and the rejection of claims 48 and 64 under 35 U.S.C. § 102 should be withdrawn.

(4) With respect to claims 49 and 61, the Office Action states that Vaishnavi discloses wherein said at least one distributed polling gateway software executing on said central management system to enable a user to define said at least one state model, wherein once a user defines said at least one state model. Applicant respectfully notes that the Office Action failed to state the entire of claims 49 and 61 that were rejected, leaving

out the clause "it is communicated to said one or more distributed gateways for execution thereon". Applicant has responded to the rejection as if the whole of claims 49 and 61 were rejected.

In rebuttal to the above, as stated previously, there is no capability suggested or disclosed in Vaishnavi that would allow Applicant's claimed user defining said at least one state model. To provide such a capability, Vaishnavi would have to provide a user interface and a means for storing what the user entered into a format that would be efficiently accessible by the synchronization module so that device states could be determined. It is not obvious that a user would define the state machine or state table of Vaishnavi because both of those could be defined by a computer. Vaishnavi does not provide for the definition of either the state machine or the state table, and thus cannot anticipate Applicant's claims 49 and 61. For this reason, the rejection of claims 49 and 61 under 35 U.S.C. § 102 should be withdrawn.

Applicant asserts that dependent claim 9 is allowable at least by virtue of its dependence upon independent claim 1.

On pages 5 and 10-11, the Office Action has rejected claims 5, 31, and 50 based on the cited passage col. 5, lines 23-42. In the cited passage, Vaishnavi states that discovery, or querying the devices to obtain information, may use a standard protocol such as SNMP that could define and store the set of managed entities discovered by the discovery mechanism, that SNMP could enable information to be conveyed to and from the managed devices, and that the discovery mechanism could exist as a separate off-the-shelf package.

With respect to claim 31, the Office Action states that Vaishnavi discloses wherein said user-defined activation condition specifies that said poll service is for a particular type of network element.

In rebuttal to the above, as previously stated there is no provision for user definition in Vaishnavi, and thus Vaishnavi cannot anticipate Applicant's claimed user-defined activation condition. Further, Vaishnavi states a specific poll service, one that operates based on an internal clock or timer, but Vaishnavi does not disclose or suggest that the poll service is for a particular type of network element. To provide this capability, Vaishnavi would have to provide a way to relate a poll service to a particular device just as Vaishnavi has related a status to a particular device. Since there is no such disclosure

in Vaishnavi, and since there is no way that a user can define anything in Vaishnavi, Vaishnavi cannot anticipate Applicant's claim 31, and the rejection of claim 31 under 35 U.S.C. § 102 should be withdrawn.

(2) With respect to claim 50, the Office Action states that Vaishnavi discloses at least one user-defined poll service that includes one or more of said at least one state model.

In rebuttal to the above, Applicant reiterates that Vaishnavi does not provide for a user to define a poll service, and it is not obvious that the polling frequency is set by a user, but could vary based on the machine type, the network loading, or any such characteristics that could most efficiently be determined by a computer, not a user. For this reason, Vaishnavi does not anticipate Applicant's claim 50, and the rejection of claim 50 under 35 U.S.C. § 102 should be withdrawn.

Applicant asserts that dependent claim 5 is allowable at least by virtue of its dependence upon allowable independent claim 1.

On pages 5-6 and 8, the Office Action has rejected claims 6, 10, 20, 38, and 45 based on cited passage col. 6, lines 9-20. In the cited passage, Vaishnavi states that the model control module receives status information that can include a polling result, a discovery result, a hard reboot message, as well as other information, that the status information may be received directly by the polling manager and the discovery mechanism, that the polling manager and discovery mechanism could make the status information available to the model control module, and that the model control module initiates events with respect to the model.

(1) With respect to claims 6 and 38, the Office Action states that Vaishnavi discloses wherein said at least one distributed polling gateway filters data.

In rebuttal to the above, while Vaishnavi states that status information is received into the polling manager and discovery mechanism, and those data are used to determine and provide appropriate messages to the model control module to initiate events, Applicant, on the contrary, claims a distributed polling gateway that filters data. The purpose of filtering process is to select some data and discard other data. Vaishnavi does not disclose such a process. In the system of Vaishnavi, incoming data map to appropriate messages, and thus Vaishnavi states a mapping process, not a filtering process. For this

reason, Vaishnavi does not anticipate Applicant's claims 6 and 38, and the rejection of claims 6 and 38 under 35 U.S.C. § 102 should be withdrawn.

(2) With respect to claims 20 and 45, the Office Action states that Vaishnavi discloses wherein software code executes on at least one distributed polling gateway communicatively coupled to said central management system to perform said step of correlating.

In rebuttal to the above, as stated previously, Vaishnavi does not disclose or suggest Applicant's claimed distributed polling gateway separate from, but communicatively coupled to, a central management system. Vaishnavi's polling manager is part of Vaishnavi's network manager, not a separate structure. Even if there were such a structure in Vaishnavi, there is no step of correlating that is disclosed or suggested in Vaishnavi. Correlation is a mutual relationship of two or more things. In Applicant's Specification, on pages 15-16, Applicant has provided an example of correlation of models which includes triggering an action when a pattern of events happens. In Vaishnavi, on the contrary, the polling manager or discovery mechanism receive data and provide messages to the model control module based on the data, and the model control module initiates an action based on a message, but nowhere does Vaishnavi indicate that a correlation of the incoming data with itself or with other data is taking place. Because Vaishnavi does not disclose or suggest a polling gateway structure, and because Vaishnavi does not disclose or suggest the step of correlating, Vaishnavi cannot anticipate Applicant's claims 20 and 45, and the rejection of claims 20 and 45 under 35 U.S.C. § 102 should be withdrawn.

Applicant asserts that dependent claim 10 is patentable at least by virtue of its dependence upon allowable claim 1.

On pages 6-7 and 9-11, the Office Action has rejected claims 12, 13, 14, 16, 29, 30, 32, 33, 34, 40, 41, 51, 53, and 54 based on cited passages col. 4, lines 5-22; col. 6, lines 26-42.

In the first cited passage (col. 4, lines 5-22), Vaishnavi states that the synchronization module includes a model control module coupled to a network model that includes device models, that the model control module is coupled to each of a state machine, a polling manager, a discovery mechanism, and a reset mechanism, that the model control module creates and maintains device models that represent the status of

manageable devices, that the network model may contain additional information (to the device models shown in the drawing), such as connectivity information with respect to the devices of the network, that synchronization is achieved when the state of the network model matches the state of the actual network, and that the control module reads the status of the devices when synchronization is reached to determine appropriate control to be applied to the network. In other words, the model control modules creates device and therefore network models that are compared to the actual network, and when the model and the actual network match, the control module uses the status of the devices in the network to determine an action to take with respect to the network.

In the second cited passage (col. 6, lines 26-42), Vaishnavi states that determining the previous state of a device may be achieved by accessing a memory location that stores the status information of a device, or by querying a model such as the object-oriented model of the device models, that the new state of the device is determined based upon the previous state and the status information received, that the new states may be one of a plurality of states (unknown, initialized, lost, established after lost, up, down, and unknown), and that by allowing the device model to contain more than two states, the synchronization module may more accurately represent the status of the device. In other words, the previous state of a device is stored in memory, the new state of the device is determined based on the previous state and received status information, and the new state can have greater than two values.

Applicant asserts that claims 12-14, 40, 41, 53, and 54 are allowable at least by virtue of their dependence upon allowable independent claims 1, 35, and 48.

With respect to claim 16, the Office Action states that Vaishnavi discloses wherein said at least one distributed polling gateway determining that said one or more user-defined state transition conditions are satisfied in a user-defined number of consecutive polls of said at least one network element, then a state transition for said at least one network element is triggered. With respect to claim 29, the Office Action states that Vaishnavi discloses wherein said user-defined event includes a particular fault condition defined by a user. With respect to claim 30, the Office Action states that Vaishnavi discloses wherein said at least one poll service is executed only if a user-defined activation condition for said at least one poll service is satisfied. With respect to claim 32, the Office Action states that Vaishnavi discloses wherein said central management system enables a

user to dynamically define said at least one poll service during runtime. With respect to claim 33, the Office Action states that Vaishnavi discloses wherein said central management system enables a user to dynamically define said at least one state model during runtime. With respect to claim 34, the Office Action states that Vaishnavi discloses wherein said central management system enables a user to dynamically modify an existing poll service or state model during runtime. With respect to claim 51, the Office Action states that Vaishnavi discloses software executing on said central management system to enable a user to define said at least one poll service, wherein once a user defines said at least one poll service, it is communicated to said one or more distributed gateways for execution thereon.

In rebuttal to the above, as stated previously, Vaishnavi provides no way in which a user could define anything. Further, it is not obvious that a user defines Applicant's claimed user-defined state transition conditions and user-defined number of consecutive polls (claim 16), user-defined event (claim 29), user-defined activation condition (claim 30), at least one poll service (dynamically defined and/or modified at runtime) (claims 32, 34, and 51), and at least one state model (dynamically defined and/or modified at runtime) (claims 33 and 34), because each of these attributes or structures could be automatically generated and Vaishnavi indicates automatic definition for certain structures. For example, Vaishnavi states that the model control module creates and maintains device models that represent the status of manageable devices.

In further rebuttal, even if Vaishnavi allowed user creation of Applicant's claimed attributes or structures, which it does not, nowhere does Vaishnavi disclose or suggest Applicant's claimed consecutive number of polls (claim 16). Vaishnavi states only that a timer may trigger polling, but never states if or when the polling stops. Further, Vaishnavi does not disclose or suggest the infrastructure to support dynamic definition during runtime by a user (claims 32-34), an activity that would require locks and other measures to insure against unpredictable results while the particular structure (state model or poll service) is being modified. For all these reasons, Vaishnavi cannot anticipate Applicant's claims 16, 29, 30, 32-34, and 51, and the rejection of claims 16, 29, 30, 32-34, and 51 under 35 U.S.C. § 102 should be withdrawn.

On pages 7-9, the Office Action has rejected claims 18, 25, and 43 based on the citations col. 4, lines 28-40 and col. 6, lines 26-42.

In the first cited passage (col. 4, lines 28-40), Vaishnavi states that the synchronization module is implemented as software on a floppy disk or a hard drive that controls a computer, for example, a general purpose computer such as a workstation, a mainframe, or a personal computer, that the computer controls the steps of the processes in FIGs. 3 and 4, that the computer typically includes a CPU, RAM, program memory, and a data bus, that the computer is connected to a network to receive reports, and that the computer may provide commands to devices on the network in order to control the network configuration.

In the second cited passage (col. 6, lines 26-42), Vaishnavi states that determining the previous state of a device may be achieved by accessing a memory location that stores the status information of a device, or by querying a model such as the object-oriented model of the device models, that the new state of the device is determined based upon the previous state and the status information received, that the new states may be one of a plurality of states (unknown, initialized, lost, established after lost, up, down, and unknown), and that by allowing the device model to contain more than two states, the synchronization module may more accurately represent the status of the device.

With respect to claims 18 and 43, the Office Action states that Vaishnavi discloses wherein said presenting a user interface on a management system to enable a user to define at least one state model, further comprises providing a user interface that allows a user to define a plurality of states within a state model for a network element, providing a user interface that allows a user to define at least one transition condition that specifies when a transition from one of said plurality of states to another of said plurality of states is to occur, and providing a user interface that allows a user to define at least one transition action to be performed upon the occurrence of said transition.

In rebuttal to the above, contrary to Applicant's claimed user interface that allows the user to define aspects of the system such as when a transition from one state to another state is to occur, the cited passages state only automated methods and structures. Vaishnavi lists a plurality of states, but gives no indication about how that list of states is determined or modified. Considering that the Vaishnavi system is wholly automated, it

follows that Vaishnavi would determine and modify the plurality of states in an automated way. In any case, Vaishnavi has not provided Applicant's claimed user interface, and for this reason, Vaishnavi cannot anticipate Applicant's claims 18 and 43 and the rejection of claims 18 and 43 under 35 U.S.C. § 102 should be withdrawn.

Applicant asserts that dependent claim 25 is allowable at least by virtue of its dependence upon allowable independent claim 1.

On page 11, the Office Action has rejected claims 56 and 57 based on the citation col. 7, lines 9-16. In the cited passage, Vaishnavi states that the state machine in one embodiment shows four different states (unknown, initialized, lost, and established after lost), the events (initialization, discovery failure, discovery successful, contact established, contact lost), and the state change that takes place as a result of a particular event being received for a device that is in a particular state.

With respect to claim 56, the Office Action states that Vaishnavi discloses at least one pattern-based state model executing thereon to correlate various of said at least one state model.

In rebuttal to the above, while Vaishnavi provides for a single state machine for each device that is used to determine the device model for each device, Vaishnavi does not disclose any interaction between the state machines for each device, nor the device models. Vaishnavi's system is circular for each device in that a device state is determined, data about the device are received, an action with respect to the device might be taken, and the device state is determined once again. Nowhere, though, does Vaishnavi disclose or suggest any interaction between the circular processes of each device, which would have to take place in order for Vaishnavi to anticipate Applicant's claimed correlating of various of at least one state model. For this reason, Vaishnavi does not anticipate Applicant's claim 56, and the rejection of claim 56 under 35 U.S.C. § 102 should be withdrawn.

With respect to claim 57, the Office Action states that Vaishnavi discloses wherein said at least one pattern-based state model specifies a user-defined pattern of states of said various models, and wherein said at least one pattern-based state model triggers an action upon said user-defined pattern of states being achieved.

In rebuttal to the above, as stated previously, Vaishnavi provides no mechanism by which a user could define a pattern of states, were Vaishnavi even to support such a structure, which it does not. Further, as stated previously, Vaishnavi's system does not specify any type of interaction between models, and therefore cannot anticipate Applicant's claimed pattern of states of said various models. For these reasons, Vaishnavi cannot anticipate Applicant's claim 57, and the rejection of claim 57 under 35 U.S.C. § 102 should be withdrawn.

Since Vaishnavi does not anticipate each and every element of Applicant's independent claims 1, 35, 48, 59, and 64, either expressly or inherently, Applicant's independent claims 1, 35, 48, 59, and 64, as well as claims 2-34, 37-47, 48-58, and 60-63 that depend, either directly or indirectly, therefrom and that further define the invention, are not made obvious by Vaishnavi, and a rejection under 35 U.S.C. § 102(b) is inappropriate. Applicant asserts that independent claims 1, 35, 48, 59, and 64, as well as claims 2-34, 37-47, 48-58, and 60-63 that depend, either directly or indirectly, therefrom, are now in condition for allowance. Applicant respectfully requests the withdrawal of rejections under 35 U.S.C. § 102(b) for the reasons set forth above. Furthermore, a 35 U.S.C. § 103 rejection of these claims would be inappropriate as well. Applicant's claimed invention is not an obvious extension of the use of Vaishnavi to meet Applicant's patentable limitations.

## III. CONCLUSION

In view of the absence in Vaishnavi of Applicant's claimed invention as set forth above, Applicant respectfully urges that Vaishnavi is not sufficient to render the presently claimed invention anticipated under 35 U.S.C. 102(b).

Since independent claims 1, 35, 48, 59, and 64 are believed to be in condition for allowance for the reasons stated above, all dependent claims are believed to be in condition for allowance as well by virtue of the further patentable limitations found therein in addition to their dependence upon allowable independent claims.

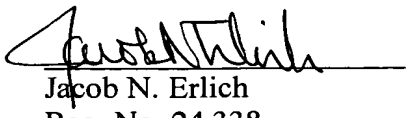
No fees are anticipated. However, the Commissioner for Patents is authorized to charge any further additional fees or credit overpayment to Deposit Account No. 50-1078.

The following information is presented in the event that a call may be deemed desirable by the Examiner:

JACOB N. ERLICH (617) 854-4000

Respectfully submitted,
Semih Secer, Applicant

Date: March 16, 2006

By: 
Jacob N. Erlich
Reg. No. 24,338
Attorney for Applicant